## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 17 February 2005 (17.02.2005)

PCT

## (10) International Publication Number WO 2005/015774 A1

(51) International Patent Classification:

H04B 7/14

(21) International Application Number:

PCT/AU2004/001052

(22) International Filing Date: 9 August 2004 (09.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003904167

8 August 2003 (08.08.2003) AU

- (71) Applicant (for all designated States except US): CLIP-SAL INTEGRATED SYSTEMS PTY LTD [AU/AU]; 12 Park Terrace, Bowden S.A. 5007 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): QUICK, Ashleigh, Glen [AU/AU]; 12 Park Terrace, Bowden, S.A. 5007 (AU). TERRACE, Donald, Murray [AU/AU]; 12 Park Terrace, Bowden, S.A. 5007 (AU).
- (74) Agent: MADDERNS; 1st Floor, 64 Hindmarsh Square, Adelaide, South Australia 5000 (AU).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RADIO NETWORK COMMUNICATION SYSTEM AND PROTOCOL USING AN AUTOMATIC REPEATER

-Acknowledge Status -Acknowledge AÇ. Repeat Tag Preamble Repeated Data Collision Data (Variable Length) Repeat 3 (Variable Length) **Transaction** 

(57) Abstract: A radio frequency communications network (10) system and protocol for allowing the dissemination of data to be shared by devices (A,B) within the network. The invention is particularly useful when the devices are out of transmission range of each other. The network (10) includes the use of repeater devices (40) located between the devices (A,B) to manage the data transfer in the network. The invention also provides for data transfer management in the presence of collisions between conflicting data transmissions.



